 Networks formative assessment tool

1. How many edges does this graph have?



* 1. 4
	2. 5
	3. 6
	4. Not sure yet
1. How many vertices does this graph have?



* 1. 7
	2. 6
	3. 5
	4. Not sure yet
1. What is the degree of the vertex labelled E?



* 1. 2
	2. 3
	3. 4
	4. Not sure yet
1. In which of the following situations could a network be used?
	1. Which streets to take on the way to school.
	2. Modelling the flow of energy in the ocean food chain.
	3. The cost of connecting different towns to a certain power station.
	4. All of the above.
	5. Not sure yet.
2. Using Prim's algorithm, determine the weight of the minimum spanning tree for this network. Enter the number only.



1. What is the length of the shortest path to get from Kurri to Woy Woy?



Solutions

1. c
2. b
3. c
4. d
5. 30 **i.e.** connect AD, AB, BC
6. 260 **i.e.** Kurri to West Wallsend to Toronto to Gosford to Woy Woy.